

Title (en)

METHOD FOR MONITORING THE TORSION OF A ROTARY SHAFT ON A TURBOMACHINE OF AN AIRCRAFT

Title (de)

VERFAHREN ZUR ÜBERWACHUNG DER TORSION EINER ROTIERENDEN WELLE AN EINER TURBOMASCHINE EINES FLUGZEUGS

Title (fr)

PROCEDE DE SURVEILLANCE DE LA TORSION D'UN ARBRE ROTATIF SUR UNE TURBOMACHINE D'UN AERONEF

Publication

EP 4058772 A1 20220921 (FR)

Application

EP 20861965 A 20201113

Priority

- FR 1912727 A 20191114
- FR 2020052075 W 20201113

Abstract (en)

[origin: WO2021094693A1] A method for monitoring the torsion of a rotary shaft on a turbomachine of an aircraft from measurements of at least three sensors distributed along the rotary shaft so as to divide the shaft into at least two shaft segments, the method comprising: - a step, for each sensor, of measuring a parameter dependent on the rotation of the shaft, - a step, for each realizable pair of sensors, of calculating a parameter associated with the torsion of the shaft, - a step of comparing the various parameters associated with the torsion of the shaft that have been calculated with references, - a step of detecting damage to a shaft segment at the end of the comparison step, and - a step of indicating the location of the damage to the shaft from the shaft segment for which damage has been detected.

IPC 8 full level

G01M 15/14 (2006.01); **G01L 3/10** (2006.01)

CPC (source: EP US)

F01D 21/003 (2013.01 - US); **G01L 3/109** (2013.01 - EP US); **G01M 15/14** (2013.01 - EP US); **F05D 2220/323** (2013.01 - US);
F05D 2260/83 (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 3103273 A1 20210521; FR 3103273 B1 20220128; CN 114981633 A 20220830; EP 4058772 A1 20220921; US 11788931 B2 20231017;
US 2022390328 A1 20221208; WO 2021094693 A1 20210520

DOCDB simple family (application)

FR 1912727 A 20191114; CN 202080092840 A 20201113; EP 20861965 A 20201113; FR 2020052075 W 20201113;
US 202017755984 A 20201113